

**APPENDIX C4**

**BACKGROUND INFORMATION DOCUMENT**

NOVEMBER  
2020



BASIC ASSESSMENT PROCESS

**DEVELOPMENT OF A CLUSTER OF RENEWABLE ENERGY FACILITIES BETWEEN SOMERSET EAST AND MAKHANDA,**

EASTERN CAPE

A cluster of renewable energy facilities is proposed to be developed on various project sites located between Somerset East and Grahamstown within the Cookhouse Renewable Energy Development Zone (REDZ), as well as the Eastern Strategic Transmission Corridor. The cluster consists of nine (9) projects which includes six (6) wind farms, two (2) solar energy facilities and one (1) Main Transmission Substation (MTS). A suitable project site for each development has been identified by the project development companies (refer to the attached locality map and table for details).

The entire extent of the projects is located within the Sarah Baartman District Municipality. The western section is located within the Blue Crane Route Local Municipality and the eastern section within the Makana Local Municipality.

Savannah Environmental has been appointed as the independent consultants to undertake Environmental Impact Assessment processes for the projects. The procedure to be followed in applying for environmental authorisation for a large-scale project in a REDZ as well as grid infrastructure within a Strategic Transmission Corridor was formally gazetted on 16 February 2018 (in GN113 and GN114). As such, these renewable energy projects and the proposed MTS, are subject to a Basic Assessment (BA) as gazetted, as well as a shortened timeframe of 57 days for the processing of an Application for Environmental Authorisation following submission of the final BA Report.

The nature and extent of the projects are set out in more detail in this document. All the projects have been included in this background information document (BID) due to the location of the project sites that are in close proximity to one another, and all projects forming part of a cluster of renewable energy facilities. The public participation processes for the projects will also be undertaken concurrently, offering Interested and/or Affected Parties (I&APs) the opportunity to understand the development as a whole and provide comments on all the projects.

#### **Aim of this background information document**

This document aims to provide you, as an I&AP, with:

- » an overview of the proposed projects which form part of the cluster.
- » an overview of the Basic Assessment (BA) processes and the studies being undertaken to assess the environmental impacts associated with the proposed projects.
- » details of how you can become involved in the BA processes, receive information, or raise issues regarding the proposed projects which may concern and/or interest you.

#### **Overview of the proposed project**

The identified project sites form the basis of investigation for the Basic Assessment (BA) processes. The preferred sites for the projects comprise properties which are privately owned and available for the proposed projects through agreement with the landowners, and are deemed technically feasible by the project developer for such development to take place.

The cluster of projects is divided into two areas, known as the Western Section and the Eastern Section, with the Western Section located near Somerset East and the Eastern Section near Grahamstown. The western section contains seven (7) of the nine projects and the eastern section the remaining two (2) projects.

The projects are proposed in specific response to national government policy dictating energy development within the project sites, namely the Integrated Resource Plan (IRP), which includes the requirement for diversification of the country's energy mix to include renewable energy. Furthermore, Government has prioritised post COVID-19 turnaround plans in terms of renewable energies within the Just Energy Transition (JET), coupled with key development objectives of the various spheres of government from a National, Provincial and Local level. These policies share the same ideals, such as:

- » The utilisation, application and investment in renewable energy resources in South Africa is considered to be an essential means of reducing the carbon footprint of the country,
- » Diversifying the national economy,
- » Reducing poverty, and
- » Providing critical additional energy to that of Eskom



The project sites identified for development are deemed desirable for development based on the wind resource (measured through wind masts deployed on site since 2011), solar resource and available grid connection capacity which connects the Eastern Cape Province to Mpumalanga Province. As the area has been identified as a REDZ, it is earmarked for fast track development of renewable energy. The mix of wind and solar will ensure the optimisation of a supply of steady state baseload type power, as well as play a significant role in the Just Energy Transition ("JET") by supplying low cost energy to the national grid. At the same time, it will contribute to a JET fund to assist in transitioning jobs from the fossil fuel sector in Mpumalanga to renewable energy. The high-quality wind resource, proximity to the transmission infrastructure and scale of the portfolio may also play a possible role in contributing to the hydrogen economy in South Africa, with Europe as a possible export market.

The cluster is expected to have a meaningful contribution to job creation and development in the region (specifically in the local towns like Makhanda, Bedford, Cookhouse, Aicedale, Somerset East and Adelaide), and ensure optimisation of electricity supply.

The table below provides the project specific details for each of the six wind farm projects contained within the cluster.



Project Name	Hamlett Wind Farm	Rippon Wind Farm	Redding Wind Farm	Aeolus Wind Farm	Wind Garden Wind Farm	Fronteer Wind Farm
Applicant	Hamlett (Pty) Ltd	Rippon (Pty) Ltd	Redding Wind (Pty) Ltd	Aeolus (Pty) Ltd	Wind Garden (Pty) Ltd	Fronteer (Pty) Ltd
Section	Western	Western	Western	Western	Eastern	Eastern
Affected properties (i.e. project site)	<ul style="list-style-type: none"> <li>Farm Vaalkop No 164</li> <li>Remainder of Portion 1 (Midlev ale) of Farm Van Aardts Kraal No 163</li> <li>Portion 1 of Farm Jaskraal No 160</li> <li>Remainder of Farm Riet Fontein A No 159</li> <li>Portion 1 of Farm Riet Fontein A No 159</li> <li>Remainder of Farm Jaskraal No 160</li> <li>Remainder of Farm Nieuwe Grond A No 129</li> <li>Remainder of Farm Wilton No 409</li> <li>Portion 2 of Farm Middleton No 219</li> <li>Remainder of Farm Bloemhof No 166</li> <li>Farm Wilde Honden Kloof No 216</li> <li>Portion 1 of Farm Bloemhof No 166</li> </ul>	<ul style="list-style-type: none"> <li>Remaining Extent of Farm No 381</li> <li>Remaining Extent of Farm Wilton No 409</li> <li>Portion 7 of Farm No 381</li> <li>Remaining Extent of Farm Hartebeest Kuil No 220</li> <li>Portion 1 of Farm Hartebeest Kuil No 220</li> <li>Portion 2 of Farm Haartebeestkuil No 220</li> <li>Portion 2 of Farm No 230</li> <li>Remaining Extent of Portion 4 (Pruim Plaas) of Farm Draai Hoek No 221</li> </ul>	<ul style="list-style-type: none"> <li>Farm No 369</li> <li>Portion 2 of Farm Shepherds Rest No 272</li> <li>Remainder of Farm Varkens Kuil No 269</li> <li>Portion 3 (Vlak Leegte) of Farm Driefontein No 259</li> <li>Portion 1 (Opmeet Fontein) of farm Gras Fonteyn No 258</li> <li>Remainder of Farm Draai Van Klein Visrivier 254</li> <li>Portion 1 of Farm Bothas Hoop 358m</li> <li>Remainder of 271 of Farm Request 271</li> <li>Portion 2 of Farm Request 271</li> <li>Portion 1 of Farm Request 271</li> <li>Portion 9 of Farm Britzkraal No 253</li> <li>Portion 8 (a Portion of Portion 7) of Farm Britzkraal No 253</li> </ul>	<ul style="list-style-type: none"> <li>Remainder of Farm Brand Rug No 268</li> <li>Remainder of Farm Varkens Kuil No 269</li> <li>Remainder of Portion 3 of Farm Commadagga No 266</li> <li>Portion 1 of Farm Vaalkdrans No 299</li> <li>Portion 1 Glen Roy of Farm Varkens Kuil No 269</li> <li>Portion 3 Glen Roy a portion of Portion 1 of Farm Modderfontein No 302</li> <li>Portion 2 Spitzkop of Farm Varkens Kuil No 269</li> </ul>	<ul style="list-style-type: none"> <li>Remaining Extent of Farm Brackkloof No 183</li> <li>Portion 5 of Farm Hilton No 182</li> <li>Portion 8 of Farm Hilton No 182</li> <li>Portion 4 of Farm Vandermerweskraal No 132</li> <li>Portion 1 of Farm Thursford No 183</li> </ul>	<ul style="list-style-type: none"> <li>Remainder of Farm Table Hill Farm No 187</li> <li>Portion 2 of Table Hill Farm No 187</li> <li>Portion 3 of the Farm Table Hill Farm No 187</li> <li>Remainder of the Farm Hounshow No 131</li> <li>Portion 1 of Farm Draai Farm No 184</li> <li>Portion 1 of Farm No 132</li> <li>Portion 1 of Farm Burnt Kraal No 189</li> <li>Portion 1 of Farm Table Hill No 187</li> </ul>
Contracted Capacity	Up to 333MW	Up to 324MW	Up to 576MW	Up to 297MW	Up to 264MW	Up to 213MW
No of turbines	Up to 37	Up to 36	Up to 64	Up to 33	Up to 47	Up to 38
Turbine hub height	Up to 166m	Up to 166m	Up to 166m	Up to 166	Up to 120m	Up to 120m
Turbine tip height	Up to 246m	Up to 246m	Up to 246m	Up to 246m	Up to 200m	Up to 200m
Rotor diameter	Up to 160m	Up to 160m	Up to 160m	Up to 160m	Up to 160m	Up to 160m



Project Name	Hamlett Wind Farm	Rippon Wind Farm	Redding Wind Farm	Aeolus Wind Farm	Wind Garden Wind Farm	Fronteer Wind Farm
On-site substation size and capacity	132/33kV collector substation of 100mX100m	132/33kV collector substation of 100mX100m	132/33kV collector substation of 100mX100m	132/33kV collector substation of 100mX100m	132/33kV collector substation of 100mX100m	132/33kV collector substation of 100mX100m
Access Roads (internal and main)	4.5m in width and of a gravel nature	4.5m in width and of a gravel nature	4.5m in width and of a gravel nature	4.5m in width and of a gravel nature	4.5m in width and of a gravel nature	4.5m in width and of a gravel nature
Other associated infrastructure	A 132kV switching station; a 132/33kV on-site collector substation; a 132kV overhead single-or double circuit loop-in loop -out power line; concrete turbine foundations and turbine hardstands; temporary laydown areas which will accommodate storage and assembly areas; cabling between the turbines, to be laid underground where practical; a temporary concrete batching plant; staff accommodation; and Operation and Maintenance buildings including a gate house, security building, control centre, offices, warehouses, a workshop and visitor's centre.					

The table below provides the project specific details for each of the two solar energy facility projects contained within the cluster:

Project Name	Solaris Fields Solar Energy Facility	Sun Garden Solar Energy Facility
Applicant	Solaris Fields (Pty) Ltd	Sun Garden (Pty) Ltd
Section	Western	Western
Affected properties (i.e. project site)	<ul style="list-style-type: none"> <li>• Portion 9 of Farm Britzkraal No 253</li> <li>• Portion 8 (a Portion of Portion 7) of Farm Britzkraal No 253</li> <li>• Portion 7 of Farm Britzkraal No 253</li> <li>• Portion 1 of Farm Bothas Hoop No 358</li> </ul>	<ul style="list-style-type: none"> <li>• Portion 9 of Farm Britzkraal No 253</li> <li>• Portion 8 (a Portion of Portion 7) of Farm Britzkraal No 253</li> <li>• Portion 7 of Farm Britzkraal No 253</li> <li>• Portion 1 of Farm Bothas Hoop No 358</li> </ul>
Contracted Capacity	Up to 300MW	Up to 300MW
Technology	Photovoltaic (PV)	Photovoltaic (PV)
Technology	Photovoltaic (PV)	Photovoltaic (PV)
On-site substation size and capacity	132/33kV collector substation of 100mX100m	132/33kV substation of 100mX100m
Access Roads (internal and main)	4.5m in width and of a gravel nature	4.5m in width and of a gravel nature
Other associated infrastructure	A 132/33kV on-site collector substation; a 132kV overhead single-or double circuit loop-in loop -out power line; centralised inverter stations or string inverters; cabling between the panels, to be laid underground where practical; a temporary laydown area; staff accommodation; and Operation and Maintenance buildings including a gate house and security building, control centre, offices, warehouses, a workshop and visitor's centre.	

Project Name	REDZ 3 Power Corridor 400MTS
Applicant	Wind Relic (Pty) Ltd
Section	Western
Affected properties (i.e. project site)	<ul style="list-style-type: none"> <li>• Farm 434</li> <li>• Portion 3 of Farm Driefontein 259</li> </ul>
Capacity	400KV
Footprint	600mX600m
Access Roads (internal and main)	4.5m in width and of a gravel nature

The table below provides the project specific details for the Main Transmission Substation contained within the cluster:

For the assessment of the MTS the developer has identified a larger area within which the MTS will be placed in order to cater for the avoidance of sensitive environmental features. This larger area will have an extent of approximately 400ha. The siting of the 400 kV MTS forms part of Eskom's planning for the area for new proposed substations - Poseidon B and C.

It is the developer's intention to supply the electricity generated from the facilities to private off-takers in the region, with key customer focus areas primarily being within the industrial, mining and commercial sectors where there is a need to shift towards cleaner and more sustainable sources of energy. The expected load requirements for each of the potential customers are in excess of 1 000 GWh per annum. The generated electricity will be evacuated through use of the national electricity grid and through a wheeling agreement with Eskom for the use of the existing grid connection infrastructure in the area.



## More about wind turbines

Wind turbines use the energy from the wind to generate electricity. A wind turbine consists of four large main components (**Figure 1**):

- » The rotor
- » The nacelle
- » The tower
- » The foundation unit

The mechanical power generated by the rotation of the blades is transmitted to the generator within the nacelle via a gearbox and drive train. The wind turns the blades, which in turn spin a shaft which connects to a generator and generates electricity. The use of wind for electricity generation is essentially a non-consumptive use of a natural resource and produces zero greenhouse gas emissions.

Turbines are able to operate at varying speeds. The amount of energy a turbine can harness depends on both the wind velocity and the length of the rotor blades. The turbines being considered for use at the six wind farms will range between 4.2MW - 9MW in capacity.

Various wind turbine designs and layouts on the project sites are being considered by the project developer in order to maximise the generating capacity of the sites while minimising environmental impacts. The final facility layouts, turbine capacities and models will be dependent on what is deemed suitable for the project sites in relation to, among other things, further studies of the wind regime, terrain, and environmental constraints and social sensitivities.

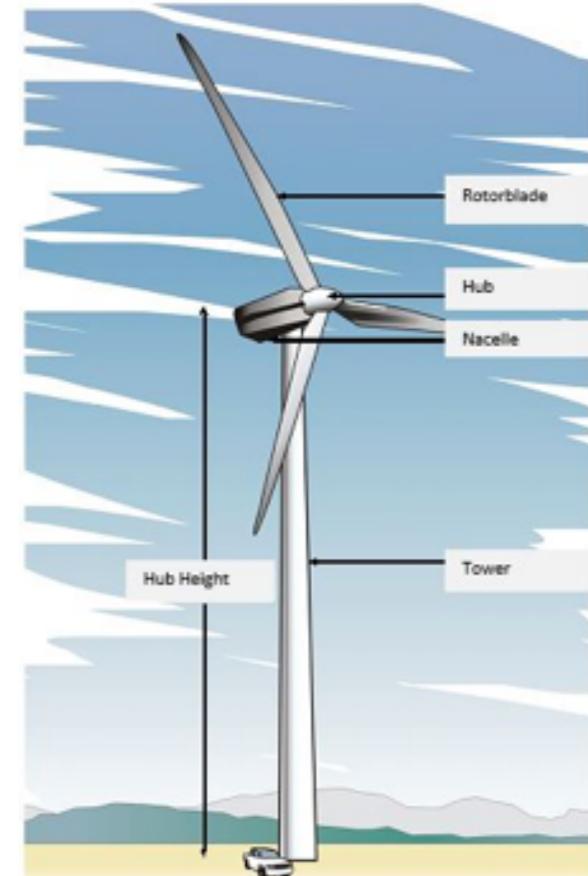
The length of the construction period for each of the wind farms is estimated to be approximately 30 months. A turbine is designed to operate continuously, with low maintenance for 20 to 25 years.

## More about solar pv technology

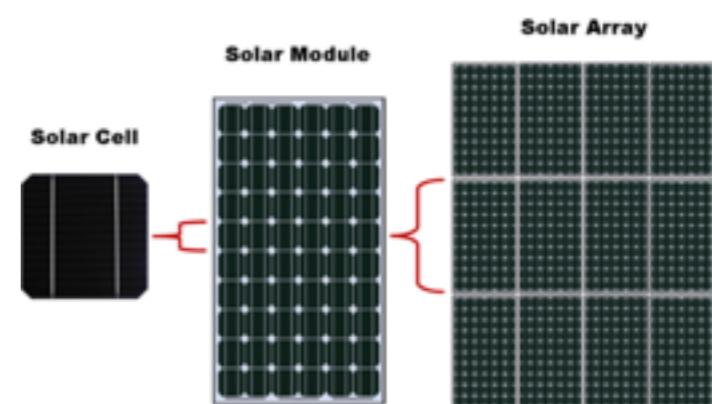
Solar energy facilities (such as those that utilise PV technology) use energy from the sun to generate electricity through a process known as the **Photovoltaic Effect**. This effect refers to photons of light colliding with electrons, and therefore placing the electrons into a higher state of energy to create electricity. The solar fields of the proposed solar energy facilities will comprise the following components:

### Photovoltaic Cells

A photovoltaic (PV) cell is made of silicone that acts as a semiconductor used to produce the photovoltaic effect. PV cells are arranged in multiples / arrays and placed behind a protective glass sheet to form a PV panel. Each PV cell is positively charged on one side and negatively charged on the opposite side, with electrical conductors attached to either side to form a circuit. This circuit captures the released electrons in the form of an electric current (i.e. Direct Current (DC)).



**Figure 1:** Main components of a wind turbine



**Figure 2:** Overview of a PV cell, module and array/panel  
(Source: pveducation.com)



A PV solar panel is made up of individual PV cells connected together, whereas a solar PV array is a system made up of a group of individual solar PV panels electrically wired together to form a much larger PV installation.

The PV panels will be fixed to support structures and will utilise a horizontal single-axis tracking system. Bifacial panels are being considered.

#### Inverters

Inverters are used to convert electricity produced by the PV cells from Direct Current (DC) into Alternating Current (AC), to enable the facility to be connected to the national electricity grid. In order to connect large solar facilities, such as the ones being proposed, to the national electricity grid, numerous inverters will be arranged in several arrays to collect and convert power produced by the facilities.

PV panels are designed to operate continuously for more than 20 years, mostly unattended and with low maintenance. The length of the construction phase for each solar energy facility will be between 24 and 30 months.

#### Basic assessment processes

As per the EIA Regulations published in terms of Section 24(5) of the National Environmental Management Act No 107 of 1998 (NEMA), the applicants will require authorisation from the National Department of Environment, Forestry and Fisheries (DEFF) (in consultation with Eastern Cape Department of Economic Development, Environmental Affairs and Tourism (DEDEAT)) for the undertaking of the projects. Due to the location of the project sites within a REDZ and a Strategic Transmission Corridor, Basic Assessment (BA) processes are required to be undertaken for all the proposed projects in accordance with GN113 and GN114, as formally gazetted on 16 February 2018. Separate applications for Environmental Authorisation will be submitted to the DEFF for each project (i.e. nine applications in total). Each application is required to be supported by comprehensive, independent environmental studies undertaken in accordance with the EIA Regulations, 2014, as amended.

An environmental impact assessment is an effective planning and decision-making tool. It allows the environmental consequences resulting from a facility during its planning, construction and operation to be identified and appropriately managed. It provides the opportunity for the developer to be forewarned of potential environmental issues, and allows for the resolution of the issue(s) reported on in the BA report as well as dialogue with interested and/or affected parties. Local level issues associated with the siting of the planned wind farms, solar energy facilities and MTS are being considered by specialist consultants through pre-construction monitoring campaigns and site-specific studies and assessments in order to delineate areas of potential sensitivity within each of the broader areas and the identified project sites. Once constraining factors have been defined, the layout of the wind turbines, solar panels, MTS and all associated infrastructure will be planned to minimise social and environmental impacts as far as possible.

Savannah Environmental has been appointed as the independent environmental consultant, to undertake separate Basic Assessments for the projects to identify and assess all potential environmental impacts associated with the various projects and recommend appropriate mitigation measures in an Environmental Management Programme (EMPr) for those impacts which cannot be avoided. As part of these environmental studies, I&APs will be actively involved through the public involvement process being undertaken by Savannah Environmental.

#### What are the potential environmental impacts associated with the projects?

Based on the nature and extent of the proposed projects, the nature of the affected area, and experience of the consultants on similar projects and within the study area, a number of potential environmental impacts associated with the development of the various projects have been identified at this stage in the process. Impacts on the following are being fully assessed through separate specialist studies for each project:

- » Biodiversity – which includes ecology, wetlands, fauna and flora and assesses the potential impact and the associated disturbance of vegetation on the ecology and biodiversity (including critical biodiversity areas and broad-scale processes).
- » Avifauna – which includes pre-construction monitoring in terms of the relevant guidelines and assesses the impact on avifaunal habitats and sensitive species.
- » Bats – which include pre-construction monitoring in terms of the relevant guidelines and assesses the impact on bat habitats and sensitive species.
- » Soils and agricultural potential - which includes consideration of affected land types and assesses the significance of loss of agricultural land and soil degradation and/or erosion.
- » Heritage - which includes heritage, cultural archaeological, palaeontological and cultural landscape resources, and assesses the potential of disturbance to or destruction of heritage resources during the construction phase through excavation activities.
- » Visual – which includes the visual quality of the area and assesses the impact of the development of the infrastructure associated with each project on the aesthetics within the area and on sensitive visual receptors.
- » Social and socio-economic environment – which assesses the positive and negative socio-economic impacts associated with each project.
- » Noise – which includes identification of the sensitive receptors within the area and assesses the significance of the disturbance during construction and operation of the various wind farm facilities.



- » Traffic – which assesses the impact of the developments on the traffic and road networks in the area.
- » Cumulative impacts – which assess the past, current and reasonably foreseeable future impact of the proposed projects, considered together with the impact of activities associated with the projects, that in itself may not be significant, but may become significant when added to existing and reasonably foreseeable impacts eventuating from similar or diverse activities in the area. In this regard, similar projects within a radius of 30km will be considered.

It must be noted that a combination of the studies above will be undertaken for each of the projects subject to the infrastructure associated with the individual projects and the potential impacts expected to occur. Any additional potential impacts identified through the BA processes will also be assessed in the relevant BA reports.

The independent specialist studies are being undertaken wherein the potentially significant impacts will be assessed and ground-truthed. Where avoidance of impacts is not possible, practical and achievable mitigation measures will be recommended in order to minimise the significance of the potential impacts identified. These recommendations will be included within a site-specific Environmental Management Programme (EMPr) compiled for each project. It must be noted that the EMPr for the MTS will be as per the generic template gazetted by the DEFF (GNR435).

Specialist studies will be informed by existing information, field observations and input from the public participation process. As an I&AP, your input is considered an important part of the process, and we urge you to become involved.

#### **Public involvement process**

The sharing of information forms the basis of the public involvement process and offers you the opportunity to become actively involved in the BA processes from the outset. Comments and inputs from I&APs during the BA process are encouraged in order to ensure that all potential impacts are considered within the ambit of the study.

The public involvement process aims to ensure that:

- » Information containing all relevant facts in respect of the applications is made available to I&APs for review.
- » Participation by potential I&APs is facilitated in such a manner that I&APs are provided with a reasonable opportunity to comment on the application.
- » Adequate review periods are provided for I&APs to comment on the findings of the BA reports.

The Public Participation Process will be undertaken in-line with the Public Participation Plan which has been approved by DEFF.

#### **Your responsibilities as an I&AP**

In terms of the Department of Environmental Affairs Public Participation Guideline 2017 (published in terms of section 24J of NEMA), as part of the BA process an I&AP has the responsibility to:

- » Provide comment regarding the projects within the specified timeframes.
- » Submit written comment directly to the EAP.
- » Disclose any direct business, financial, personal or other interest which that I&AP may have in the approval or refusal of the applications.

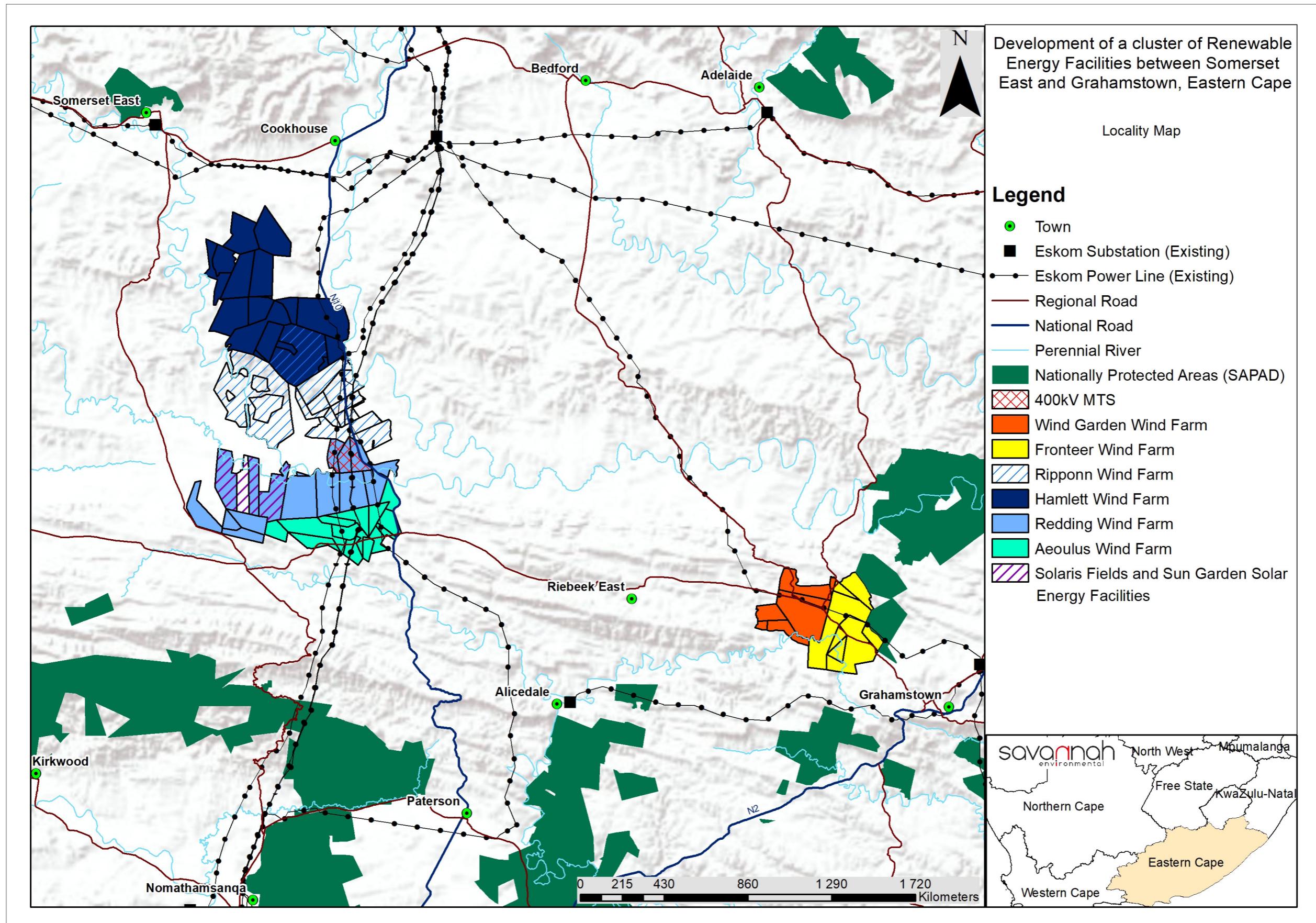
#### **How to become involved**

1. By responding (by phone (including mobile), post, fax or email) to our invitation for your involvement which has been advertised in provincial and local newspapers and on site.
2. By returning the attached Reply Form to the relevant contact person.
3. By attending the meetings to be held (through a virtual platform) during the course of the BA process. Face-to-face meetings could be held but only where sanitary conditions and where the Regulations relating to minimising the risks associated with COVID-19 can be observed.
4. By contacting the consultants with queries or comments.
5. By reviewing and commenting on the BA Reports within the stipulated 30-day review periods.

If you consider yourself an I&AP for the proposed projects, we urge you to make use of the opportunities created by the public involvement process to provide comment, or raise those issues and concerns which affect and/or interest you, and about which you would like more information. Your input into this process forms a key element of the BA process.



Figure 3: Locality Map





## COMMENTS AND QUERIES

Direct all comments, queries or responses to:

Savannah Environmental  
Nicolene Venter  
P.O. Box 148, Sunninghill, 2157  
Mobile: 060 978 8396  
Tel: 011 656 3237  
Fax: 086 684 0547  
Email: [publicprocess@savannahsa.com](mailto:publicprocess@savannahsa.com)

To view project documentation, visit  
**[www.savannahSA.com](http://www.savannahSA.com)**



NOVEMBER  
2020



BASIESE EVALUERINGSPROSESSE

**ONTWIKKELING VAN 'N GROEP HERNUBARE KRAGAANLEGTE  
TUSSEN SOMERSET-OOS EN MAKHANDA**

OOS-KAAP

'n Groep hernubare kragaanlegte word beoog vir ontwikkeling op verskeie projekterreine wat tussen Somerset-oos en Makhanda. 'n Groep lê in die Cookhouse Hernubare Kragontwikkelingsone (REDZ), asook die Oostelike Strategiese Transmissiekorridor, geleë is. Die groep bestaan uit nege (9) projekte, met insluiting van ses (6) windplase, twee (2) sonkragaanlegte en een (1) hooftransmissiesubstasie (HTS). Die projekontwikkelings-maatskappye het 'n gesikte projekterrein vir elke ontwikkeling geïdentifiseer (raadpleeg die meegaande liggingskaart en tabel vir besonderhede).

Die hele omvang van die projekte is in die Sarah Baartman Distriksmunisipaliteit geleë. Die westelike gedeelte is in die Bloukraanvoëlroete Plaaslike Munisipaliteit en die oostelike gedeelte in die Makana Plaaslike Munisipaliteit geleë.

Savannah Environmental is aangestel as die onafhanklike konsultante om Omgewingsimpak-evaluatingsprosesse vir die projekte te onderneem. Die prosedure wat gevvolg moet word om aansoek te doen om omgewingsmagtiging vir 'n grootskaalprojek in 'n REDZ, asook roosterinfrastruktuur in 'n Strategiese Transmissiekorridor, is op 16 Februarie 2018 formeel in die staatskoerant (Staatskennisgiving R113 en R114) aangekondig. Gevolglik is hierdie hernubare kragprojekte en die beoogde HTS onderhewig aan 'n Basiese Evaluering (BE), soos aangekondig, asook aan 'n verkorte tydsraamwerk van 57 dae vir die verwerking van 'n Aansoek om Omgewingsmagtiging ná indiening van die finale BE-verslag.

Die aard en omvang van die projekte word van naderby in hierdie dokument uiteengesit. Weens die ligging van die projekterreine wat naby mekaar geleë is en omdat al die projekte deel vorm van 'n groep hernubare kragaanlegte, is al die projekte in hierdie agtergrondinligtingsdokument (AID) ingesluit. Die openbare deelnameprosesse vir die projekte sal ook samelopend onderneem word, wat aan belangstellende en/of geaffekteerde (B&GP's) die geleentheid bied om die ontwikkeling as 'n geheel te verstaan en om kommentaar op al die projekte te lewer.

#### **Doel van hierdie agtergrondinligtingsdokument**

Hierdie dokument poog om u, as 'n B&GP, te voorsien van:

- » 'n oorsig van die beoogde projekte wat deel van die groep vorm;
- » 'n oorsig van die Basiese Evaluatingsprosesse (BE-prosesse) en die studies wat onderneem word om die omgewingsimpakte te evalueer wat verband hou met die beoogde projekte; en
- » besonderhede van hoe u by die BE-prosesse betrokke kan raak, inligting kan ontvang of vraagstukke met betrekking tot die beoogde projekte kan opper wat u dalk kan raak en/of vir u van belang kan wees.

#### **Oorsig van die projekte**

Die geïdentifiseerde projekterreine vorm die grondslag van die ondersoek vir die Basiese Evaluatingsprosesse (BE-prosesse). Die terreine van voorkeur vir die projekte bestaan uit eiendomme wat in privaatbesit is en beskikbaar is vir die beoogde projekte deur ooreenkoms met die grondeienaars, en word deur die projekontwikkelaar as tegnies uitvoerbaar geag vir sodanige ontwikkeling om plaas te vind.

Die groep projekte is in twee gebiede verdeel, wat as die Westelike Gedeelte en die Oostelike Gedeelte bekend staan, met die Westelike Gedeelte naby Somerset-Oos en die Oostelike Gedeelte naby Makhanda. Die westelike gedeelte behels sewe (7) van die nege projekte en die oostelike gedeelte die oorblywende twee (2) projekte.

Die projekte word beoog in spesifieke reaksie op die nasionale regering se beleid wat kragontwikkeling in die projekterreine voorskryf, naamlik die Geïntegreerde Hulpbronnenplan (GHP), wat die vereiste insluit vir diversifisering van die land se kragmengsel om hernubare krag in te sluit. Voorts het die regering ná COVID-19 omkeerplanne ten opsigte van hernubare krag in die Just Energy Transition (JET), gekoppel aan belangrike ontwikkelingsdoelwitte van die verskeie regeringsfere op nasionale, provinsiale en plaaslike vlak, geprioritiseer.

Hierdie beleide deel dieselfde ideale, soos:

- » die benutting, aansoek en belegging in hernubare kraghulpbronne in Suid-Afrika wat geag word om 'n noodsaaklike manier te wees om die land se koolstofvoetspoor te verklein;
- » diversifisering van die nasionale ekonomie;
- » verminderung van armoede; en
- » verskaffing van kritiese krag bykomend tot dié van Eskom.



Op grond van die windhulpbron (gemeet deur windtorings wat sedert 2011 op die terrein ontplooい is), sonhulpbron en beskikbare roosterkonneksievermoë wat die Oos-Kaapprovinsie met die Mpumalangaprovincie verbind, word die projekterreine wat vir ontwikkeling geïdentifiseer is, as gewens geag vir ontwikkeling. Aangesien die gebied as 'n REDZ geïdentifiseer is, is dit geoormerk vir bespoedigde ontwikkeling van hernubare krag. Die mengsel van wind- en sonkrag sal die optimalisering van 'n voorsiening van bestendige staat basislas-soort krag verseker, en sal ook 'n beduidende rol speel in Just Energy Transition ("JET") deur laekoste krag aan die nasionale kragnet te voorsien. Terselfdertyd sal dit bydra tot 'n JET-fonds om te help om werksgeleenthede oor te skakel van die fossielbrandstofsektor in Mpumalanga na hernubare krag. Die hoëgehalte windhulpbron, nabyheid aan die transmissie-infrastruktuur en skaal van die portefeuille, kan ook 'n moontlike rol speel om by te dra tot die waterstofekonomie in Suid-Afrika, met Europa as 'n moontlike uitvoermark.

Na verwagting kan die groep 'n betekenisvolle bydrae tot werkskepping en ontwikkeling in die streek hê (veral in die plaaslike dorpe soos Makhanda, Bedford, Cookhouse, Aicedale, Somerset-Oos en Adelaide) en die optimalisering van elektrisiteitvoorsiening verseker.

Die tabel hieronder bied die projekspesifieke besonderhede vir elk van die ses windplaasprojekte wat deel van die groep is.



Projeknaam	Hamlett Windplaas	Rippon Windplaas	Redding Windplaas	Aeolus Windplaas	Wind Garden Windplaas	Fronteer Windplaas
Applicant	Hamlett (Edms.) Bpk.	Rippon (Edms.) Bpk.	Redding Wind (Edms.) Bpk.	Aeolus (Edms.) Bpk.	Wind Garden (Edms.) Bpk.	Fronteer (Edms.) Bpk.
Afdeling	Westelik	Westelik	Westelik	Westelik	Oostelik	Oostelik
Geaffekteerde eiendomme (d.i. projekterrein)	<ul style="list-style-type: none"> <li>Plaas Vaalkop No. 164</li> <li>Restant van Gedeelte 1 (Middlevale) van plaas Van Aardts Kraal No. 163</li> <li>Gedeelte 1 van plaas Jaskraal No. 160</li> <li>Restant van plaas Riet Fontein A No. 159</li> <li>Gedeelte 1 van Plaas Riet Fontein A No. 159</li> <li>Restant van plaas Jaskraal No. 160</li> <li>Restant van plaas Nieuwe Grond A No. 129</li> <li>Restant van plaas Wilton No. 409</li> <li>Gedeelte 2 van plaas Middleton No. 219</li> <li>Restant van plaas Bloemhof No. 166</li> <li>Plaas Wilde Honden Kloof No. 216</li> <li>Gedeelte 1 van plaas Bloemhof No. 166</li> </ul>	<ul style="list-style-type: none"> <li>Restant van Plaas No. 381</li> <li>Restant van plaas Wilton No. 409</li> <li>Gedeelte 7 van Plaas No. 381</li> <li>Restant van plaas Hartebeest Kuil No. 220</li> <li>Gedeelte 1 van plaas Hartebeest Kuil No. 220</li> <li>Gedeelte 2 van plaas Haartebeestkuil No. 220</li> <li>Gedeelte 2 van Plaas No. 230</li> <li>Restant van Gedeelte 4 (Pruim Plaas) van plaas Draai Hoek No. 221</li> </ul>	<ul style="list-style-type: none"> <li>Plaas No. 369</li> <li>Gedeelte 2 van plaas Shepherds Rest No. 272</li> <li>Restant van plaas Varkens Kuil No. 269</li> <li>Gedeelte 3 (Vlak Leegte) van plaas Driefontein No. 259</li> <li>Gedeelte 1 (Opmeet Fontein) van plaas Gras Fonteyn No. 258</li> <li>Restant van plaas Draai Van Klein Visrivier 254</li> <li>Gedeelte 1 van plaas Bothas Hoop 358m</li> <li>Restant van 271 van plaas Request 271</li> <li>Gedeelte 2 van plaas Request 271</li> <li>Gedeelte 1 van plaas Request 271</li> <li>Gedeelte 9 van plaas Britzkraal No. 253</li> <li>Gedeelte 8 ('n gedeelte van Gedeelte 7) van plaas Britzkraal No. 253</li> </ul>	<ul style="list-style-type: none"> <li>Restant van plaas Brand Rug No. 268</li> <li>Restant van plaas Varkens Kuil No. 269</li> <li>Restant van Gedeelte 3 van Plaas Commadagga No. 266</li> <li>Gedeelte 1 van plaas Vaalkdrans No. 299</li> <li>Gedeelte 1 (Glen Roy) van plaas Varkens Kuil No. 269</li> <li>Gedeelte 3 (Glen Roy, 'n gedeelte van Gedeelte 1) van plaas Modderfontein No. 302</li> <li>Gedeelte 2 (Spitzkop) van plaas Varkens Kuil No. 269</li> </ul>	<ul style="list-style-type: none"> <li>Restant van plaas Brakkloof No. 183</li> <li>Gedeelte 5 van plaas Hilton No. 182</li> <li>Gedeelte 8 van plaas Hilton No. 182</li> <li>Gedeelte 4 van plaas Vandermerwes-kraal No. 132</li> <li>Gedeelte 1 van plaas Thursford No. 183</li> </ul>	<ul style="list-style-type: none"> <li>Restant van plaas Table Hill Farm No. 187</li> <li>Gedeelte 2 van Table Hill Farm No. 187</li> <li>Gedeelte 3 van die plaas Table Hill Farm No. 187</li> <li>Restant van die plaas Hounshow No. 131</li> <li>Gedeelte 1 van plaas Draai Farm No. 184</li> <li>Gedeelte 1 van Plaas No. 132</li> <li>Gedeelte 1 van plaas Burnt Kraal No. 189</li> <li>Gedeelte 1 van plaas Table Hill No. 187</li> </ul>
Gekontrakteerde vermoë	Hoogstens 333 MW	Hoogstens 324 MW	Hoogstens 576 MW	Hoogstens 297 MW	Hoogstens 264 MW	Hoogstens 213 MW
Aantal turbines	Tot 37	Tot 36	Tot 64	Tot 33	Tot 47	Tot 38
Turbine se naafhoogte	Hoogstens 166 m	Hoogstens 166 m	Hoogstens 166 m	Hoogstens 166 m	Hoogstens 120 m	Hoogstens 120 m



Projeknaam	Hamlett Windplaas	Rippon Windplaas	Redding Windplaas	Aeolus Windplaas	Wind Garden Windplaas	Fronteer Windplaas
Turbine se spitshoogte	Hoogstens 246 m	Hoogstens 246 m	Hoogstens 246 m	Hoogstens 246 m	Hoogstens 200 m	Hoogstens 200 m
Rotordeursnee	Hoogstens 160 m	Hoogstens 160 m	Hoogstens 160 m	Hoogstens 160 m	Hoogstens 160 m	Hoogstens 160 m
Vermoë en grootte van interne substasie	132/33 kV kollektorsubstasie van 100 m x 100 m	132/33 kV kollektorsubstasie van 100 m x 100 m	132/33 kV kollektorsubstasie van 100 m x 100 m	132/33 kV kollektorsubstasie van 100 m x 100 m	132/33 kV kollektorsubstasie van 100 m x 100 m	132/33 kV kollektorsubstasie van 100 m x 100 m
Toegangspaaie (intern en hoof)	4,5 m breed en gruis van aard	4,5 m breed en gruis van aard	4,5 m breed en gruis van aard	4,5 m breed en gruis van aard	4,5 m breed en gruis van aard	4,5 m breed en gruis van aard
Ander verwante infrastruktur	'n 132 kV skakelstasie; 'n 132/33 kV interne kollektorsubstasie; 'n 132 kV oorhoofse enkel- of dubbelring inlus-uitlus-kraglyn; beton turbinefondasies en -vasteblaai; tydelike stapelwerwe wat bergings- en monteergebiede sal akkommodeer; kabels tussen die turbines, wat ondergronds gelê moet word waar dit prakties moontlik is; 'n tydelike betonlotaanleg; personeelverblyf; en bedryfs- en instandhoudingsgeboue met insluiting van 'n hekhuis, sekerheidsgebou, beheersentrum, kantore, store, 'n werkswinkel en besoekersentrum.					

Die tabel hieronder bied die projekspesifieke besonderhede vir elk van die twee sonkragaanlegprojekte wat deel van die groep is.

Projeknaam	Solaris Fields Sonkragaanleg	Sun Garden Sonkragaanleg
Applikant	Solaris Fields (Edms.) Bpk.	Sun Garden (Edms.) Bpk.
Afdeling	Westelik	Westelik
Geaffekteerde eiendomme (d.i. projekterrein)	<ul style="list-style-type: none"> <li>Gedeelte 9 van plaas Britzkraal No. 253</li> <li>Gedeelte 8 ('n gedeelte van Gedeelte 7) van plaas Britzkraal No. 253</li> <li>Gedeelte 7 van plaas Britzkraal No. 253</li> <li>Gedeelte 1 van plaas Bothas Hoop No. 358</li> </ul>	<ul style="list-style-type: none"> <li>Gedeelte 9 van plaas Britzkraal No. 253</li> <li>Gedeelte 8 ('n gedeelte van Gedeelte 7) van plaas Britzkraal No. 253</li> <li>Gedeelte 7 van plaas Britzkraal No. 253</li> <li>Gedeelte 1 van plaas Bothas Hoop No. 358</li> </ul>
Gekontrakteerde Vermoe	Hoogstens 300 MW	Hoogstens 300 MW
Tegnologie	Fotovoltaïes (FV)	Fotovoltaïes (FV)
Hoogte van die FV-panele	Hoogstens 2 m	Hoogstens 2 m
Vermoë en grootte van interne substasie	132/33 kV kollektorsubstasie van 100 m x 100 m	132/33 kV substasie van 100 m x 100 m
Toegangspaaie (intern en hoof)	4,5 m breed en gruis van aard	4,5 m breed en gruis van aard
Ander verwante infrastruktur	'n 132/33 kV interne kollektorsubstasie; 'n 132 kV oorhoofse enkel- of dubbelring inlus-uitlus-kraglyn; sentrale wisselrigterstasies of stringwisselrigters; kabels tussen die panele, wat ondergronds gelê moet word waar dit prakties moontlik is; 'n tydelike stapelwerf; personeelverblyf; en bedryfs- en instandhoudingsgeboue met insluiting van 'n hekhuis, sekerheidsgebou, beheersentrum, kantore, store, 'n werkswinkel en besoekersentrum.	

Die tabel hieronder bied die projekspesifieke besonderhede vir die hooftransmissiesubstasie (HTS) wat deel van die groep is.

Projeknaam	REDZ 3 Kragkorridor 400 HTS
Applikant	Wind Relic (Edms.) Bpk.
Afdeling	Westelik
Geaffekteerde eiendomme (d.i. projekterrein)	<ul style="list-style-type: none"> <li>Plaas 434</li> <li>Gedeelte 3 van plaas Driefontein 259</li> </ul>
Vermoë	400 kV
Voetspoor	600 m x 600 m
Toegangspaaie (intern en hoof)	4,5 m breed en gruis van aard

Vir die evaluering van die HTS, het die ontwikkelaar 'n groter gebied geïdentifiseer waarin die HTS geplaas sal word ten einde dit moontlik te maak om sensitiwe omgewingskenmerke te vermy. Hierdie groter gebied sal 'n omvang van sowat 400 ha beslaan. Die plasing van die 400 kV HTS vorm deel van Eskom se beplanning vir die gebied vir pas-beoogde substasies – Poseidon B en C.

Die ontwikkelaar is van voorneme om die elektrisiteit wat by die aanlegte opgewek gaan word, aan privaat afsetters in die streek te voorsien, met belangrike kliëntefokusgebiede wat hoofsaaklik in die nywerheids-, mynbou- en kommersiële sektore is waar daar 'n behoefte is om oor te skuif na skoner en meer volhoubare kragbronne. Die verwagte ladingsvereistes van elke potensiële kliënt is meer as 1 000GWh per jaar. Die opgewekte krag sal aan die hand van die benutting van die nasionale kragnet en deur 'n tolooreenkoms met Eskom vir die gebruik van die bestaande roosterkonneksie-infrastruktur in die gebied, ontruim word.



## Meer oor windturbines

Windturbines maak gebruik van windkrag om elektrisiteit op te wek. 'n Windturbine bestaan uit vier hoofonderdele (**Figuur 1**):

- » Die rotor;
- » nacelle (turbinehuis);
- » toring; en
- » fondasie-eenheid.

Die meganiese krag wat deur die rotasie van die skroewe opgewek word, word via 'n ratkas en dryfwerk aan die generator binne-in die nacelle (turbinehuis) oorgedra. Die wind draai die skroewe wat op hul beurt 'n as draai wat aan 'n generator gekoppel is wat elektrisiteit opwek. Die aanwending van wind vir die opwekking van elektrisiteit is in wese 'n nie-verbruikende benutting van 'n natuurlike hulpbron en stel geen kweekhuisgasse vry nie.

Turbines kan teen verskillende snelhede funksioneer. Die hoeveelheid energie wat 'n turbine kan inspan, hang af van beide die windsnelheid en die lengte van die rotorskroewe. Die turbines wat vir hierdie ses windphase oorweeg word, sal varieer tussen 4,2 MW en 9 MW in vermoë.

Die projekontwikkelaar oorweeg verskeie windturbine-ontwerpe en -uitelegte op die projekterreine om die opwekkingsvermoë van die terreine te maksimaliseer terwyl die omgewingsimpakte geminimaliseer word. Die finale uitleg van die aangelede, turbinevermoëns en modelle sal afhang van wat geag word as geskik vir die projekterreine in verhouding tot, onder andere, verdere studies van die windregime, terrein en omgewingsbeperkings en dinge wat maatskaplik sensitief is.

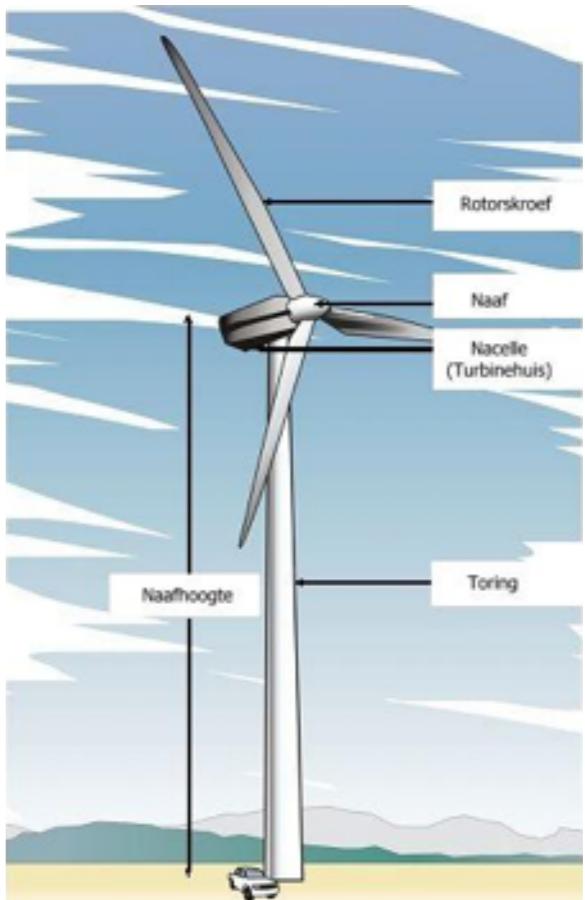
Die tydsduur van die konstruksietydperk vir elk van die windphase word op sowat 30 maande beraam. 'n Turbine is ontwerp om ononderbroke en met min instandhouding vir 20 tot 25 jaar in bedryf te staan.

## Meer oor fv-sonkragtegnologie

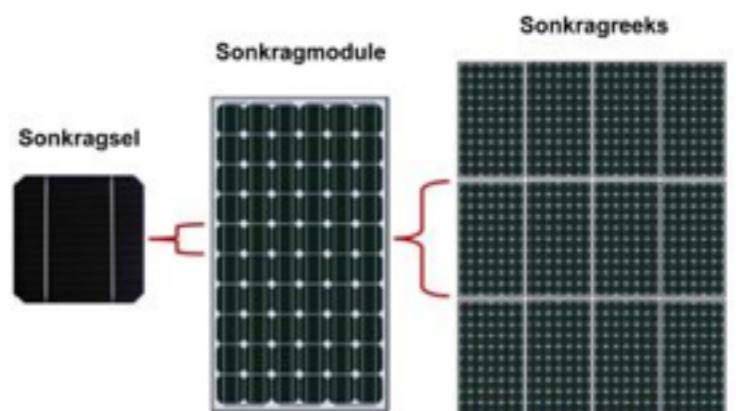
Sonkragaanlegte (soos dié wat FV-tegnologie gebruik), wend die son se energie aan om elektrisiteit op te wek deur 'n proses wat as die Fotovoltaïese Effek bekend staan. Hierdie effek verwys na ligfotone wat met elektrone bots, wat die elektrone gevoglik in 'n hoër staat van energie plaas om elektrisiteit voort te bring. Die beoogde sonkragaanlegte se sonkragvelde sal uit die volgende komponente bestaan:

### Fotovoltaïese Selle

'n Fotovoltaïese (FV) sel word van silikon gemaak wat as halfgeleier optree en gebruik word om die fotovoltaïese effek voort te bring. FV-selle word in veelvoude/rangskikkings agter 'n beskermende glaspaneel geplaas om 'n FV-paneel te vorm. Elke FV-sel se een kant is positief en die teenoorgestelde kant negatief gelaaai, met elektriese geleiers wat aan beide kante aangebring is om 'n stroombaan te vorm. Hierdie stroombaan vang die vrygestelde elektrone vas in die vorm van 'n elektriese stroom (d.i. gelykstroom (GS)).



Figuur 1: Hoofonderdele van 'n windturbine



Figuur 2: Oorsig van 'n FV-sel, -module en -rangskikking/paneel  
(Bron: pveducation.com)



'n FV-sonpaneel bestaan uit individuele FV-selle wat met mekaar verbind is, terwyl 'n FV-sonkragreeks 'n stelsel is wat bestaan uit 'n groep individuele FV-sonpanele wat elektries saambedraad is om 'n veel groter FV-installasie te vorm.

Die FV-panele sal op steunstrukture aangebring word en sal 'n horisontale enkelas-naspoorstelsel gebruik. Bifokale panele word oorweeg.

#### **Wisselrigters**

Wisselrigters word gebruik om elektrisiteit wat deur die FV-selle opgewek word van gelykstroom (GS) na wisselstroom (WS) om te sit sodat die aanleg met die nasionale kragnet verbind kan word. Ten einde groot sonkragaanlegte, soos dié wat beoog word, met die nasionale kragnet te verbind, sal verskeie wisselrigters in verskeie reekse gerangskik word om die krag wat by die aanlegte opgewek word, te versamel en om te skakel.

FV-panele is ontwerp om vir meer as 20 jaar ononderbroke, meestal onbeman en met min instandhouding in bedryf te staan. Die tydsduur van die konstruksiefase vir elke sonkragaanleg sal tussen 24 en 30 maande wees.

#### **Basiese evalueringsprosesse**

Ooreenkomsdig die OIE-regulasies wat kragtens Artikel 24(5) van die Nasionale Wet op Omgewingsbestuur (Wet 107 van 1998) (NEMA) gepubliseer is, sal die applikante Omgewingsmagtiging (OM) van die Nasionale Departement van Omgewing, Bosbou en Visserye (DEFF) (in oorleg met die Oos-Kaapse Departement van Ekonomiese Ontwikkeling, Omgewingsake en Toerisme (DEDEAT)) vir die onderneming van die projekte moet kry. Weens die ligging van die projekterreine in die REDZ en 'n Strategiese Transmissiekorridor, moet Basiese Evalueringssprosesse (BE's) vir al die beoogde projekte ingevolge Staatskennisgewing R113 en R114, soos formeel aangekondig in die Staatskoerant op 16 Februarie 2018, onderneem word. Aparte aansoeke om Omgewingsmagtiging sal vir elke projek by die DEFF ingedien word (d.i. altesaam nege aansoeke). Elke aansoek moet gerugsteun word deur omvattende, onafhanklike omgewingstudies wat ingevolge die OIE-regulasies, 2014, soos gewysig, onderneem is.

'n Omgewingimpaksevaluering is 'n doeltreffende beplannings- en besluitnemingswerktuig. Dit bring mee dat die omgewingsverwante gevolge wat voortspruit uit die beplanning, oprigting en bedryf van 'n aanleg, geïdentifiseer en na behore bestuur word. Dit bied die ontwikkelaar die geleentheid om vooraf gewaarsku te wees teen potensiële omgewingskwesties en bied die geleentheid om die vraagstuk(ke) waaroor verslag gedoen is in die BE-verslag, asook uit dialoog met belangstellende en/of geaffekteerde partye, op te los. Vraagstukke op plaaslike vlak wat verband hou met die plasing van die beplande windplase, sonkragaanlegte en HTS, word deur spesialistkonsultante oorweeg deur moniteringsveldtogte vóór oprigting en terreinspesifieke studies en evaluerings ten einde gebiede van potensiële sensitiwiteit in elk van die groter gebiede en die geïdentifiseerde projekterreine, af te baken. Sodra beperkende faktore omskryf is, sal die uitleg van die windturbines, sonpanele, HTS en alle verwante infrastruktuur beplan word om maatskaplike en omgewingsimpakte sover moontlik tot die minimum te beperk.

Savannah Environmental is aangestel as die onafhanklike omgewingskonsultant om die aparte Basiese Evaluering vir die projekte te onderneem om alle verwante potensiële omgewingsimpakte ten opsigte van die onderskeie projekte te identifiseer en te evaluer, en om gepaste versagtingsmaatreëls in 'n Omgewingsbestuursprogram (OBPr) aan te beveel vir daardie impakte wat nie vermy kan word nie. As deel van hierdie omgewingstudies sal B&GP's aktief betrokke raak deur die openbare betrokkenheidsproses wat deur Savannah Environmental onderneem word.

#### **Wat is die potensiële omgewingsimpakte wat verband hou met die projekte?**

Op grond van die aard en omvang van die beoogde projekte, die aard van die geaffekteerde gebied en ervaring van die konsultante op eenderse projekte en in die studiegebied, is 'n aantal potensiële omgewingsimpakte wat verband hou met die ontwikkeling van die onderskeie projekte, op hierdie stadium in die proses geïdentifiseer. Impakte op die volgende word volledig geëvalueer deur aparte spesialisstudies vir elke projek:

- » Biodiversiteit – wat insluit ekologie, vleilande, fauna en flora en wat die potensiële impak en gepaardgaan de versteuring van plantegroei op die ekologie en biodiversiteit (met insluiting van kritiese biodiversiteitsgebiede en breëskaalprosesse) evalueer.
- » Avifauna – wat insluit monitoring voor oprigting in gevolge die tersaaklike riglyne en wat die impak op avifaunahabitats en sensitiewe spesies evalueer.
- » Vlermuise – wat insluit monitoring vóór oprigting in gevolge die tersaaklike riglyne en wat die impak op vlermuishabitats en sensitiewe spesies evalueer.
- » Grond en landboupotensiaal – wat insluit oorweging van geaffekteerde grondsoorte en wat die wesenlikheid van verlies aan landbougrond en gronddegradasie en/ of erosie evalueer.
- » Erfenis – wat insluit erfenis, kultuur-argeologiese, paleontologiese en kultuurlandskaphulpbronnes en wat die potensiële versteuring of vernietiging van erfenis hulpbronnes tydens die konstruksiefase weens opgrawingsbedrywigheede evalueer.
- » Visueel – wat insluit die visuele gehalte van die gebied en wat die impak van die ontwikkeling van infrastruktuur wat met elke projek verband hou op die estetika van die gebied en op sensitiewe visuele reseptors evalueer.
- » Maatskaplike en sosio-ekonomiese omgewing – wat die positiewe en negatiewe sosio-ekonomiese impakte evalueer wat met elke projek verband hou.
- » Geraas – wat insluit om sensitiewe reseptors in die gebied te identifiseer en wat die wesenlikheid van die versteuring tydens oprigting en bedryf van die onderskeie windplaasaanlegte evalueer.



- » Verkeer – wat die impak van die ontwikkelings op die verkeer en padnetwerke in die gebied evalueer.
- » Kumulatiewe impakte – wat die vorige, huidige en redelik-voorsienbare toekomstige impak van die beoogde projekte evalueer, met inagneming van die impak van bedrywighede wat verband hou met die projekte, wat op sigself nie beduidend is nie, maar beduidend kan raak wanneer dit by bestaande en redelik-voorsienbare impakte gevoeg word wat uit eenderse of uiteenlopende bedrywighede in die gebied voorspruit. In hierdie verband sal eenderse projekte in 'n radius van 30 km in ag geneem word.

Kennis moet gedra word dat 'n kombinasie van die studies hierbo onderneem sal word vir elk van die projekte, afhangend van die infrastruktuur wat met die individuele projekte verband hou en die potensiële impakte wat na verwagting kan opduik. Enige bykomende potensiële impakte wat deur die BE-prosesse geïdentifiseer word, sal ook in die tersaaklike BE-verslae geëvalueer word.

Die onafhanklike spesialisstudies word onderneem waarin die potensieel-wesenlike impakte geëvalueer en ter plaaslike getoets sal word. Waar dit nie moontlik is om impakte te vermy nie, sal praktiese en uitvoerbare versagtingsmaatreëls aanbeveel word ten einde die wesenlikheid van die potensiële impakte wat geïdentifiseer is, te minimaliseer. Hierdie aanbevelings sal vervat word in 'n terreinspesifieke Omgewingsbestuursprogram (OBPr) wat vir elk van die projekte opgestel sal word. Let wel dat die OBPr vir die HTS volgens die generiese templaat sal geskied wat deur die DEFF in die staatskoerant (Staatskennisgewing R435) aangekondig is.

Spesialisstudies sal toegelig word deur bestaande inligting, veldwaarnemings en insette wat uit die openbare deelnameproses voortspruit. As 'n B&GP word u insette as 'n belangrike deel van die proses geag, en ons moedig u aan om betrokke te raak.

### **Openbare betrokkenheidsproses**

Die deel van inligting vorm die grondslag van die openbare betrokkenheidsproses en bied u die geleenthed om uit die staanspoor aktief by die BE-prosesse betrokke te raak. Kommentaar en insette van B&GP's tydens die BE-proses word aangemoedig ten einde te verseker dat oorweging aan alle potensiële impakte binne die omvang van die studie geskenk word.

Die openbare betrokkenheidsproses poog om te verseker dat:

- » inligting wat al die tersaaklike feite met betrekking tot die aansoek bevat, aan B&GP's beskikbaar gestel word vir insae;
- » deelname deur potensiële B&GP's op so 'n wyse gefasiliteer word dat hulle 'n redelike geleenthed gegun word om kommentaar te lewer op die aansoek; en
- » voldoende insaetyperke aan B&GP's gebied word om kommentaar te lewer oor die bevindinge van die BE-verslae.

Die Openbare Deelnameproses sal in lyn met die Openbare Deelnameplan, wat deur die DEFF goedgekeur is, onderneem word.

### **U verantwoordelikhede as 'n B&GP**

Ingevolge die Departement van Omgewingsake se Openbare Deelnameriglyn, 2017 (gepubliseer ingevolge Artikel 24J van NEMA) as deel van die BE-proses, het 'n B&GP die verantwoordelikheid om:

- » kommentaar te lewer met betrekking tot die projekte en wel in die gespesifiseerde tydsraamwerke;
- » skriftelike kommentaar regstreeks by die OEP in te dien; en
- » enige regstreekse sake-, finansiële-, persoonlike- of ander belang bekend te maak wat daardie B&GP in die goedkeuring of afkeuring van die aansoek kan hê.

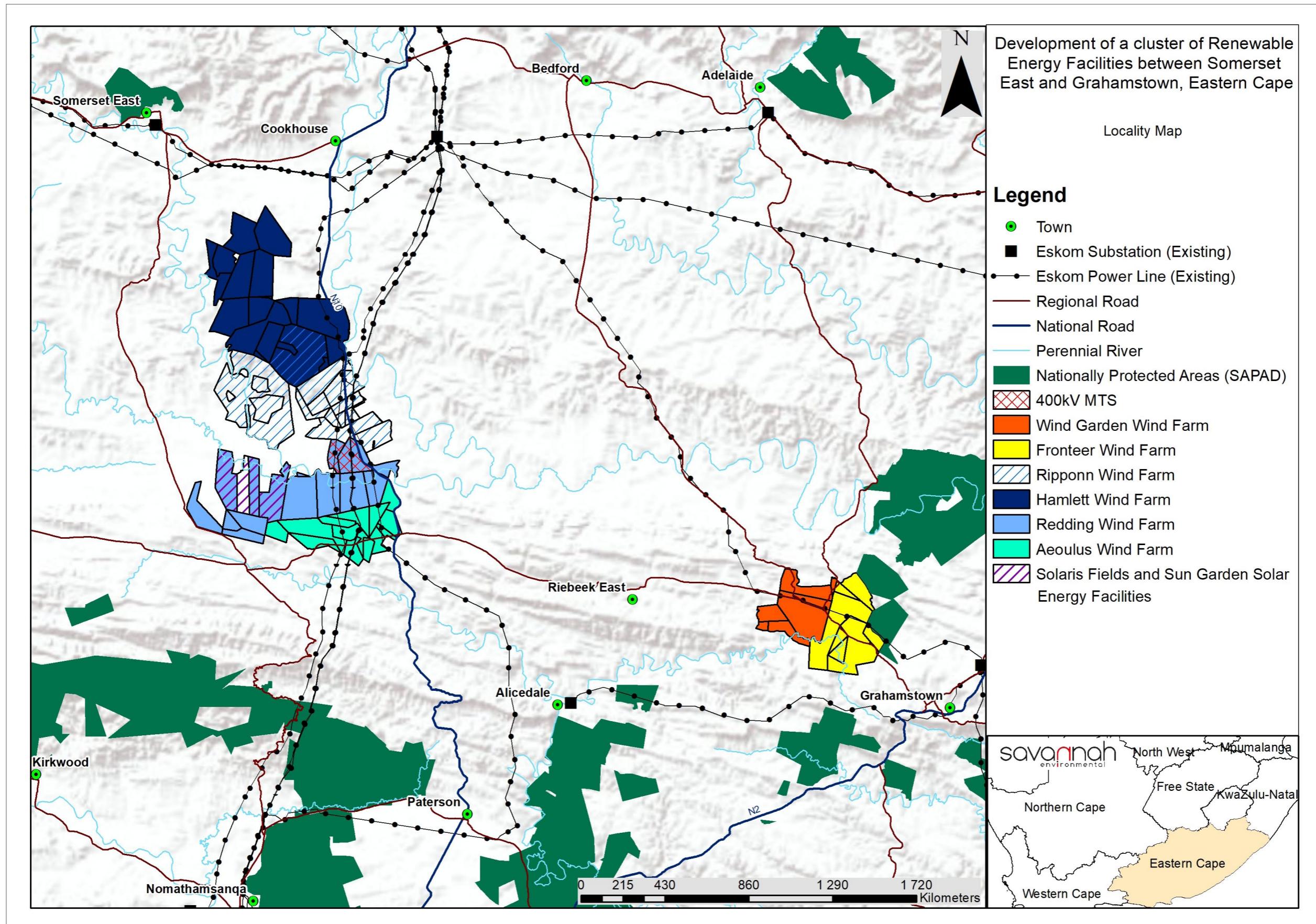
### **Hoe om betrokke te raak**

1. Deur te reageer (telefonies (insluitend selfoon), per pos, faks of e-pos) op ons uitnodiging vir u betrokkenheid wat in provinsiale en plaaslike koerante en op die terrein geadverteer is.
2. Deur die aangehegte antwoordvorm aan die tersaaklike kontakpersoon terug te besorg.
3. Deur die vergaderings by te woon wat tydens die verloop van die BE-proses (deur 'n virtuele platform) gehou sal word. In-persoon vergaderings kan gehou word, maar slegs waar sanitêre toestande en die regulasies met betrekking tot die minimalisering van die risiko's wat met COVID-19 verband hou, nagekom kan word.
4. Deur die konsultante te kontak met navrae of kommentaar.
5. Deur oorsig oor en kommentaar op die BE-verslae te bied, en wel binne die gestipuleerde openbare insaetyperke.

As u selfs as 'n B&GP vir die beoogde projekte ag, moedig ons u aan om gebruik te maak van die geleenthede wat geskep word deur die openbare deelnameproses om kommentaar te lewer of daardie vraagstukke of knelpunte te opeper wat u raak en/of waarin u belangstel en waарoor u meer inligting verlang. U insette in hierdie proses vorm 'n belangrike deel van die BE-proses.



Figuur 3: Locality Map





## KOMMENTAAR EN NAVRAE

Rig alle kommentaar, navrae of antwoorde aan:

Savannah Environmental  
Nicolene Venter  
Posbus 148, Sunninghill, 2157  
Selfoon: 060 978 8396  
Tel: 011 656 3237  
Faks: 086 684 0547  
E-pos: publicprocess@savannahsa.com

Besoek

[www.savannahSA.com](http://www.savannahSA.com)

om projekdokumentasie te besigtig.



**BASIC ASSESSMENT PROCESSES AND PUBLIC PARTICIPATION PROCESS****DEVELOPMENT OF A CLUSTER OF RENEWABLE ENERGY FACILITIES BETWEEN SOMERSET EAST AND MAKHANDA,  
EASTERN CAPE**

November 2020

Return completed registration and comment form to: **Nicolene Venter** or **Ronald Baloyi** of **Savannah Environmental**

**Phone:** 011 656 3237 / **Mobile (incl. 'please call me')**: 060 978 8396 / **Fax:** 086 684 0547

**E-mail:** publicprocess@savannahsa.com **Postal Address:** PO Box 148, Sunninghill, 2157

**Your registration as an interested and/or affected party will be applicable for this project only and your contact details provided are protected by the PoPI Act of 2013**

**Please provide your complete contact details:**

Name &					
Surname:					
Organisation:					
Designation:					
Postal Address:					
Telephone:			Fax:		
Mobile:					
E-mail:					

**Please indicate on which project/s you would like to register as an interested and affected party (I&AP)?**  
(please tick the relevant box)

**Wind Farms**

Hamlet	Rippon	Redding	Aeoulus	Wind Garden	Fronteer	
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**Solar Energy Facilities**

Solaris Fields	Sun Garden	
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**REDZ 3 Power Grid Corridor 400MTS**

Main Transmission Substation	
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**Note:** In terms of EIA Regulations, 2014, as amended, Regulation 43(1), you are required to register as an I&AP to receive further correspondence regarding the Basic Assessment process and comment on the Reports being made available for comments, and to disclose any direct business, financial, personal or other interest which you may have in the approval or refusal of the application (add additional pages if necessary):

--

**Please list your comments regarding the Environmental Impact Assessment process** (add additional pages if necessary):

--	--

**Please provide contact details of any other persons who you regard as a potential interested or affected party:**

Name & Surname:	
Postal Address:	
Telephone:	
Mobile:	
E-mail:	